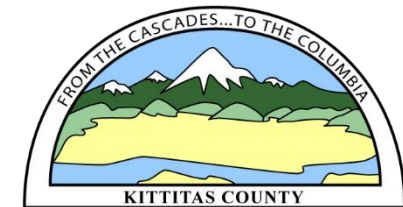


Kittitas County

Hazard Mitigation Plan

2021 Annual Implementation Report

Kittitas County, Kittitas County Fire District #51, Snoqualmie Pass Utility District, Cle Elum-Roslyn School District, Kittitas County Conservation District



County-Wide Mitigation Initiatives

No.	Priority	Description	Status
CW-1	High	Continue to maintain a countywide hazard mitigation plan website to house the plan and plan updates, in order to provide the public an opportunity to monitor plan implementation and progress. Each planning partner may support the initiative by including an initiative in its action plan and creating a web link to the website. Updates will occur annually, or more often as appropriate.	Progress made. The Hazard Mitigation Plan webpage has been updated with the 2019 adopted plan and 2020 annual report.
CW-2	Medium	Leverage public outreach partnering capabilities to inform and educate the public about hazard mitigation and preparedness.	
CW-3	High	Coordinate all mitigation planning and project efforts, including grant application support, to maximize all resources available to the planning partnership, with the County mentoring other jurisdictions with less grant application experience.	Progress made. Kittitas County is partnering on a grant application by the Department of Natural Resources to map Kittitas County debris flows / alluvial fans.
CW-4	High	Support the collection of improved data (hydrologic, geologic, topographic, volcanic, historical, etc.) to better assess risks and vulnerabilities.	Progress made. The Flood Control Zone District has installed two stream gages with real-time data. Kittitas County is partnering on a grant application by the Department of Natural Resources to map Kittitas County debris flows / alluvial fans.
CW-5	High	Provide coordination and technical assistance in grant application preparation that includes assistance in cost vs. benefit analysis for grant-eligible projects.	Progress made. Kittitas County is partnering on a grant application by the Department of Natural Resources to map Kittitas County debris flows / alluvial fans.
CW-6	High	Where appropriate, support retrofitting, purchase, or relocation of structures or infrastructure located in hazard-prone areas to protect structures/infrastructure from future damage, with repetitive loss and severe repetitive loss properties as priority when applicable.	Progress made. On August 26, 2021 the Flood Control Zone District purchased 226 acres of flood-prone property, removing two current residences and 25 potential residences from the floodplain. The Flood Control Zone District annually sends letters to landowners in repetitive loss areas.
CW-7	High	Continue to maintain the steering committee as a viable committee to monitor the progress of the hazard mitigation plan, provide technical assistance to planning partners and oversee the update of the plan as necessary.	
CW-8	High	Integrate mitigation plan requirements and actions into other appropriate planning mechanisms such as comprehensive plans and capital improvement plans.	Progress made. Two Capital Improvement Plans, Kittitas County's Road 6-year plan and the Flood Control Zone District 6-year plan includes projects that address needs identified in the Hazard Mitigation Plan.

County-Wide Mitigation Initiatives

No.	Priority	Description	Status
CW-9	High	Support mitigation projects that will result in protection of public or private property from natural hazards.	Progress made. On August 26, 2021 the Kittitas County Flood Control Zone District (FCZD) purchased 226 acres of flood-prone property, removing two current residences and 25 potential residences from the floodplain. In 2021, the FCZD and City of Ellensburg partnered on a Wilson Creek conveyance improvement project. The FCZD has designed a conveyance improvement project along the Palouse to Cascade Trail to address flooding impacts to a local neighborhood and is awaiting approval from State Parks to implement.
CW-10	High	Develop a system and designate responsible parties for capturing damage data after hazard events, to assist with capturing Public and Individual Assistance expenditures and to catalogue damages for use in developing future projects including. This data will assist with Benefit/Cost Analysis.	Progress made / ongoing activity. Following every declared emergency event, Public Works reports all damages to Kittitas County Emergency Management capturing necessary data used for determining public and private FEMA assistance program efforts.
CW-11	Medium	With Kittitas County as lead, to provide guidance to other jurisdictions, evaluate the benefits of other jurisdictions joining the NFIP Community Rating System.	Kittitas County did not provide this guidance in 2020.
CW-12	Medium	Evaluate Countywide critical facilities list and GIS layer and update as appropriate, to continue improving the risk assessment in this plan.	No action - the Risk geodatabase developed for the current hazard mitigation plan is still up to date.
CW-13	Medium	Increase stakeholder and public participation in the Kittitas County Hazard Mitigation Plan update process.	The Hazard Mitigation Plan will not be updated until 2024.
CW-14	Medium	Prioritize Kittitas County's list of potential acquisitions of flood-prone properties.	The Flood Control Zone District has applied for Flood control assistance account program funding to help inform acquisition priorities within the Easton Reach of the Yakima River.
CW-15	High	To more accurately show flood risks, develop maps that show alluvial fans, channel migration zones, and areas of cross-basin flow transfers	Progress made. Updated alluvial fan mapping is underway for Reecer Creek and Mercer and Whiskey Creeks.
CW-16	High	Improve public health responses to hazard events. For example, testing drinking water for contamination after flood events or distributing masks and closing outdoor events when air quality declines due to wildfire.	On-going Activity. In 2020, Public Health monitored indoor air quality at local schools, in response to air quality declines associated with wildfire. In the reporting period, there were not local flooding or wildfire events that required this type of response.

No.	Priority	Description	Status
KC - 1	High	Maintain the Kittitas County Flood Control Zone District	Progress made. In 2019, the FCZD Advisory Committee adopted its first Capital Plan, implementation of that plan commenced in 2020 and, updated in 2021 and implementation continues.
KC - 2	Medium	Enhance the flood warning system on major rivers and streams within Kittitas County including strengthening the computer interface and upgrading and increasing the number of weather stations.	Progress made. The Flood Control Zone District has installed two stream gages with real-time data.
KC - 3	High	Continue participation and improve rating in the Community Rating System	Progress made. In 2019 Kittitas County retained its Class 6 rating, reducing flood insurance premiums by 20%.
KC - 4	Medium	Where appropriate, support retrofitting, purchase, or relocation of structures in hazardprone areas to protect them from future damage, with priority for properties exposed to repetitive losses.	Progress made. On August 26, 2021 the Kittitas County Flood Control Zone District purchased 226 acres of flood-prone property, removing two current residences and 25 potential residences from the floodplain. The Flood Control Zone District annually sends letters to landowners in repetitive loss areas.
KC - 5	High	Adopt appropriate regulatory standards that will reduce the risk to natural hazards through updates to existing code affecting critical areas regulations, flood hazard regulations, shoreline regulations, and to the county's growth management comprehensive plan	Progress made. On August 17, 2021 Kittitas County updated its Flood Damage Prevention Ordinance to meet current state and federal requirements and enhanced requirements for Community Rating System participation.
KC - 6	High	Annually disseminate a floodplain information brochure to all floodplain area or flood risk households.	Flood information brochures are available at County offices, but were not mailed during the reporting period.
KC - 7	Medium	Retrofit, rehabilitate or replace vulnerable road facilities, bridges and infrastructure throughout Kittitas County	Progress made. Kittitas County performed bridge retrofit work on a single bridge over Manastash Creek.
KC - 8	Medium	Replace undersized bridges and culverts throughout Kittitas County	Progress made. Kittitas County replaced three undersized structures with a single appropriately sized structure on Fairview Road in Kittitas County.
KC - 9	High	Continue to maintain compliance and good standing under the National Flood Insurance Program.	Progress made. In 2021 Kittitas County made required code updates and completed its Community Assistance Visit, maintaining good standing under the National Flood Insurance Program.
KC - 10	Medium	Update the Kittitas County Comprehensive Flood Management Plan	This activity is not currently planned.
KC - 11	Medium	Where feasible, seek to elevate at-risk structures within the floodplain to an adequate freeboard that is commensurate with the flood risk. The measure of feasibility will be willing participation by the property owner and the cost-effectiveness of the project.	Progress made. The Flood Control Zone District annually sends letters to landowners in repetitive loss areas.

Kittitas County Mitigation Initiatives

No.	Priority	Description	Status
KC - 12	Medium	Upgrade or install stream gauges on rivers and streams with a flow greater than 20 cubic feet per second.	Progress made. The Flood Control District has installed gages on two creeks north of Ellensburg. These gages will form the initial elements of an early flood warning system for the Ellensburg area.
KC - 13	Medium	Conduct a study of all County-owned facilities to determine their vulnerability to natural hazards. Conduct a seismic retrofit or other mitigation to identified vulnerable structures.	No action at this time.
KC - 14	High	Begin a public outreach effort to educate landowners about Firewise and Fire Adapted Communities programs, defensible space around structures, non-combustible building materials, fuel reduction and other wildfire prevention tactics. Place information boards in key areas of the County.	Progress made. Kittitas Fire Adapted Communities conducts outreach for these topics.
KC - 15	High	Perform fuel reduction projects in high wildfire risk areas and areas with identified need throughout Kittitas County.	Progress made. The Kittitas County Conservation District, along with the Washington State Department of Natural Resources and local fire districts, runs a Wildfire Fuels Reduction Program.
KC - 16	High	Enhance the subdivision code and building code to include updated fire code requirements.	Progress made. Kittitas County updated the building code to meet state requirements.
KC - 17	High	Continue to improve and preserve fire apparatus access throughout the County, including access through private gates	Progress made. Private bridges are required to meet the 75,000 pound load limit required in fire code adoption. All gated accesses must be approved by the Fire Marshal and comply with minimum width and emergency opening device requirements.
KC - 18	Medium	Identify seiche hazard areas and adopt higher regulatory standards to protect structures within the identified areas.	No action at this time.
KC - 19	High	Continue to adopt land use policies that prohibit the placement of habitable structures in high risk landslide and avalanche areas.	No action at this time.
KC - 20	Medium	Strengthen/harden critical road facilities from the impacts of all hazards for which they have exposure and vulnerability.	No action at this time.
KC - 21	High	Proactively manage hazardous tree removal from public areas, and educate private property owners about management of their own trees	Progress made / ongoing activity. The Kittitas County Road Maintenance department removes hazardous trees threatening County rights of way as part of the annual maintenance program. Danger trees are removed following every significant wind event in the County.

Kittitas County Mitigation Initiatives

No.	Priority	Description	Status
KC - 22	High	Use the best available data and science to continually update the County risk assessment as new information becomes available (hydrologic, geologic, topographic, etc.)	Progress made. DNR is updating the LiDAR coverage for Kittitas County. Flood Control Zone District Community Technical Partner studies updates flood maps based on best available data and science.
KC - 23	High	Integrate the hazard mitigation plan into future updates of the Kittitas County Comprehensive Plan.	The Hazard Mitigation Plan will not be updated until 2024.
KC - 24	High	Continue to support the implementation, monitoring, maintenance and updating of this plan.	Progress made. Kittitas County provided an annual report on 2019 activities and has reached out to participating annexes to provide a comprehensive report for 2020 activities.
KC - 25	High	Integrate goals, objectives and initiatives of the Kittitas County Hazard Mitigation Plan into existing County regulations and programs where appropriate	Progress made through regular work programs.
KC - 26	High	Maintain an active public outreach strategy using available multiple media to inform the public how to personally prepare for and mitigate the hazards of concern.	Progress made through regular work programs.
KC - 27	Low	Support detailed ash fall studies.	No action at this time
KC - 28	Medium	Identify and create new impounded water sources	Progress made. This activity is being advanced through the Yakima Basin Integrated Plan and the Kittitas Reclamation District has been investigating potential new impounded water sources.
KC - 29	Medium	Educate the public on drought resistance and encourage the use of water saving landscaping, irrigation methods and farming practices.	Progress made. This activity is being advanced through the Yakima Basin Integrated Plan.
KC - 30	Medium	Improve irrigation conveyance systems to reduce water loss through earthen canals and ditches.	Progress made. This activity is being advanced through the Yakima Basin Integrated Plan and the Kittitas Reclamation District has been actively implementing water conservation projects along their distribution system.
KC - 31	High	Enhance the existing dam failure early warning system	No action at this time.
KC - 32	Medium	Set the course for sustained operations of critical county functions by the development of a continuity of operations plan and/or a post-disaster recovery plan.	Progress made. Work at home orders associated with COVID-19 necessitated policies and procedures for telework for continuity of operations.
KC - 33	High	Continue to support through active participation the “county-wide” initiatives identified in Volume 1 of the Kittitas County Hazard Mitigation Plan.	Progress made / ongoing activity.

No.	Priority	Description	Status
KC - 34	High	Consider participation in the National Weather Service “Storm Ready” program.	Progress made / ongoing activity. Kittitas County Public Works participates in NOAA weather briefings year round as issued from the regional office in Pendleton, OR. Advancing storm fronts are monitored and NOAA data is used to schedule supplemental maintenance crews.

Kittitas County Fire District #51 Mitigation Initiatives

No.	Priority	Description	Status
FD8-1	High	Continue to support the implementation, monitoring, maintenance and updating of this plan.	Progress Made. KCFD51 continues to support the implementation, monitoring, maintenance and updating of this plan.
FD8-2	High	Continue to support through active participation the countywide initiatives identified in volume 1 of the Kittitas County Hazard Mitigation Plan	Progress Made. KCFD51 will continue to support county wide initiatives identified in volume 1 of the Kittitas County Hazard Mitigation Plan
FD8-3	High	Participate in the Firewise program by identifying project site locations and promoting Firewise techniques as a defensible space initiative.	Progress Made. KCFD51 works with communities regarding fire wise projects including public education. KCFD51 also participates with the Kittitas County Fire Chiefs on Fire Wise projects including identifying critical fire wise sight locations in order to focus work in critical areas needing fuels reduction
FD8-4	High	Comply with all applicable building and fire codes, as well as other regulations when constructing or significantly remodeling infrastructure facilities.	Progress Made. KCFD51 works closely with the fire marshals office to ensure the county building and WUI code are followed. When variances are applied for the fire district reviews them and reports to the fire marshals office with objection or support.
FD8-5	High	Require that development in high fire hazard areas provide adequate access roads, onsite fire protection systems, evacuation signage and fire breaks.	Progress Made. KCFD51 works closely with the fire marshals office to ensure the county WUI code is applied and variance to the code are monitored and only supported if reasonable to fire protection needs
FD8-6	Medium	Enhance communication capabilities between agencies, coordination of radio types and use of existing and new systems	Progress Made. KCFD51 is upgrading its communication system to better coordinate with regional jurisdictions including the licensing and application of a new communications frequency that will serve both counties that the fire district is located in. Two new repeaters have also been installed. KCFD51 will work closely with service area partners to ensure coordination continues.

Snoqualmie Pass Utility District Mitigation Initiatives

No.	Priority	Description	Status
SPUD-1	High	Continue to support the implementation, monitoring, maintenance and updating of this plan.	Progress made. The District has taken action to continue to support the implementation, monitoring, maintenance and updating of this plan.
SPUD-2	High	Continue to support through active participation the countywide initiatives identified in Volume 1 of the Kittitas County Hazard Mitigation Plan	Progress made. The District has continued to support the plan through active participation.
SPUD-3	Medium	Develop a continuity of operations plan that looks at sustaining operations following disasters.	Progress made. This is an ongoing activity.
SPUD-4		Partner with other local governments in educating citizens on potential consequences associated with natural hazards and opportunities to mitigate their impacts.	Progress made. The District is supporting this effort
SPUD-5	High	Consider hazard mitigation and resiliency during the implementation of projects listed in the Snoqualmie Pass Utility District Water Comprehensive Plan and the Snoqualmie Pass Utility District Sewer Comprehensive Plan.	Progress made. This is element being written into the water and sewer comp plans.
SPUD-6	High	Increase fire flow storage across the Snoqualmie Pass Utility District. Two expansions are planned in the Snoqualmie Pass Utility District Water Comprehensive Plan.	Progress made. This element is still in planning stage. The District plans to build a third reservoir at Summit West in 2022-2023
SPUD-7	High	Implement wastewater treatment facility improvements, with the goal of improving the resiliency of the wastewater treatment system to the impacts of natural hazards.	Progress made. Phase 1 of 4 wastewater plant under construction and should be operational by end of 2021. A contractor is on site making repairs to the wastewater collection system to decrease infiltration.

Cle Elum - Roslyn School District # 404

Mitigation Initiatives

No.	Priority	Description	Status
CESD-1	High	Partner with Kittitas County, City of Cle Elum and City of Roslyn on emergency drills to better prepare for the impacts of all hazards on the District.	Progress Made. The District continues to work with the County and Cities.
CESD-2	High	Participate in the Firewise program by deploying Firewise techniques around school properties susceptible to wildfire hazards.	Progress Made. The spring, DNR helped the District firewise their campus .
CESD-3	Medium	Seek Hazard Mitigation Assistance Grant support from competent sources such as WA Emergency Management Division, FEMA or a contractor	The District has not had the need for this element at this time.
CESD-4	High	Continue to support through active participation the countywide initiatives identified in Volume 1 of the Kittitas County Hazard Mitigation Plan.	Progress Made. The District continues to support all initiatives.
CESD-5	High	Continue to support the implementation, monitoring, maintenance, and updating of the Kittitas County Hazard Mitigation Plan, as defined in Volume 1.	Progress Made. The District continues to support the Hazard Mitigation Plan.

Kittitas County Conservation District Mitigation Initiatives

2019 Kittitas County Hazard Mitigation Plan
2021 Annual Progress Report (October 1, 2020 - August 31, 2021)

No.	Priority	Description	Status
KCCD-1	High	Continue to develop and implement public education programs which increase public awareness of the risks associated with hazards/disasters and emergency preparedness.	Progress Made. Continued promotion of virtual workshops on website (https://www.kccd.net/fire-adapted-communities). Maintained KFACC map which provided 37 personalized fire reports to landowners. KCCD newsletter October 2020 - fire articles (circulation 12,000). Presented Forest Health/ Fuels reduction to Ellensburg noon Rotary
KCCD-2	High	Pre and post disaster technical, educational and financial assistance to private landowners including conducting damage assessments, recommending practices to address erosion risk (seeding, mulching, culvert replacements, etc.), encouraging residents to participate in the National Flood Insurance Program, and seeking funding to implement actions to reduce risk and protect homes and infrastructure.	
KCCD-3	Medium	Track conditions of and implement projects with private landowners conducting agricultural practices in frequently flooded areas, floodplains, and geologic hazard areas that improve resource conditions and maintain the viability of agriculture.	Progress Made. 5 Year status report submitted to Washington State Conservation Commission for the Voluntary Stewardship Program (VSP) in November 2020. Two year (biennial) VSP report submitted August 2021.
KCCD-4	Medium	Conduct individual property and community-wide wildfire risk assessments and evaluate potential mitigation projects.	Progress Made. 47 Home owner contacts under KCCD FEMA grant. 48 Homeowner contacts under the KCFD 7 chipping grant. Worked on three community assessments.
KCCD-5	High	Continue to work on actions items and proposed projects in the Kittitas County Community Wildfire Protection Plan including implementation of landscape scale restoration and partnering with stakeholders through the Kittitas Fire Adapted Communities Coalition (KFACC).	Progress Made. The KCCD conducted 22.8 acres of fuels reduction treatments with 8 landowners in priority areas. KCCD partnered with KCFD 7 on a chipping program 2021 that served 40 landowners
KCCD-6	High	Implement projects and conduct outreach and education for landowners to improve water use efficiencies and resiliency in drought conditions including drought resistant landscapes, reducing water system losses, and identifying alternate water supply options.	Progress Made. Completed 19 projects on 1089 acres to convert from rill irrigation to sprinkler irrigation for water conservation and drought resiliency.